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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/750,863  | 01/05/2004  | Toshiki Taguchi      | Q79274              | 3223             |
| 23373   | 7590        | 07/01/2005           | EXAMINER            |                  |
| SUGHRUE MION, PLLC<br>2100 PENNSYLVANIA AVENUE, N.W.<br>SUITE 800<br>WASHINGTON, DC 20037 |             |                      | KLEMANSKI, HELENE G |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1755                |                  |

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/750,863             | TAGUCHI ET AL.      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Helene Klemanski       | 1755                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_ is/are rejected.
- 7) Claim(s) 3,4 and 6 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/16/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: ____.                                    |

**DETAILED ACTION**

***Information Disclosure Statement***

1. The references cited in the Search Report dated March 2, 2004 have been considered.

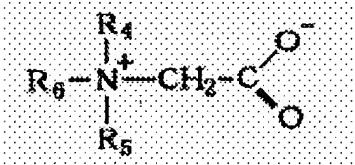
***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1213331.

EP 1213331 teaches an ink jet ink composition comprising a coloring agent such as a dye, a polyol such as 2-ethyl-1,3-hexanediol, 0.01-4 wt% of a compound of the formula



wherein R<sub>4</sub> and R<sub>5</sub> are C1-3 alkyl or hydroxyalkyl group (i.e. water-miscible organic solvent); R<sub>6</sub> is an alkyl group or an alkyl group derived from coconut oil having 10-16 carbon atoms that may contain an amide group (i.e. amino acid derivative), water and optionally a chelating agent such as EDTA, NTA etc. The ink may further contain a humectant such as a glycol and a water-soluble organic solvent such as glycerin. The

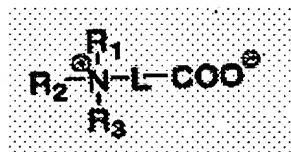
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ink jet ink composition may also be used together with a yellow ink, a magenta ink, a cyan ink and/ or a black ink to form an ink jet ink set. EP 1213331 further teaches an ink jet printing method comprising ejecting the above ink composition onto a substrate. See page 4, lines 38-41, page 5, lines 1-45, compounds (2)-1, (2)-2 and (2)-3, page 8, lines 52-56, page 9, lines 24-51, page 10, lines 2-25, page, 13, line 51 – page 14, line 1, page 14, lines 10-12, page 15, lines 52-55, example 21 and claims 1, 5, 6 and 15. EP 1213331 fails to specifically exemplify the addition of a chelating agent as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to have added the chelating agents as claimed by applicants as EP 1213331 also discloses the use of these chelating agents but fails to show an example incorporating them.

4. Claims 1, 2, 5 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1375608 in view of EP1213331.

EP 1375608 teaches an ink jet ink set comprising at least four kinds of inks wherein each contains a dye, an organic solvent, water and optionally a chelating agent and wherein at least one ink contains 0.1-20 wt% of a betaine compound of the formula



wherein R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> each represents an alkyl group; L represents a divalent linking group and at least one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and L is a group having 8-40 carbon atoms. EP 1375608 further teaches an ink jet printing method comprising ejecting the above ink

composition onto a substrate. See page 2, lines 32-60, page 3, lines 4-17, page 4, lines 28-30, compounds X-1 to X-7 and X-13 to X-18, page 7, lines 10-15, page 12, lines 21-25 and claims 1-8 and 10. EP 1375608 fails to disclose the chelating agents as claimed by applicants.

EP1213331 is cited and relied upon for the above stated reasons. EP1213331 teaches a similar ink jet ink set comprising a betaine compound and a chelating agent such as EDTA, NTA etc.

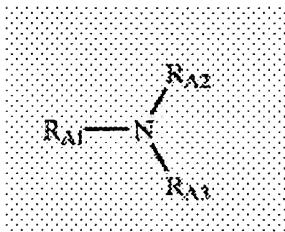
Therefore, it would have been obvious to one having ordinary skill in the art to have used the specific chelating agents as disclosed by EP1213331 in the ink jet ink set of EP 1375608 as claimed by applicants since EP 1375608 discloses that chelating agents can be added to the ink jet ink set.

5. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

#### ***Allowable Subject Matter***

6. Claims 3, 4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: None of the cited references teaches or fairly suggests the addition of an amino acid derivative of the formula



wherein R<sub>A1</sub> is an alkyl group having 6 or ore carbon atoms; R<sub>A2</sub> and R<sub>A3</sub> each represent an alkyl group, a carboxyalkyl group or a sulfoalkyl group provided that at least one of R<sub>A2</sub> and R<sub>A3</sub> is a carboxyalkyl group or a sulfoalkyl group to an ink jet ink composition as claimed by applicants.

### ***Conclusion***

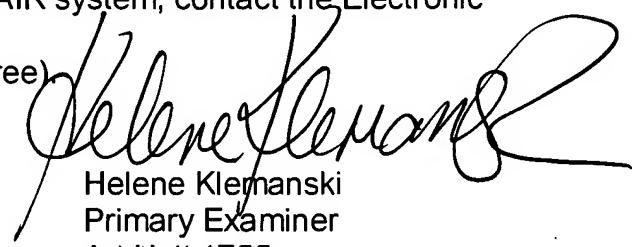
The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

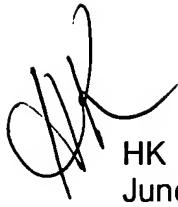
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Helene Klemanski  
Primary Examiner  
Art Unit 1755



HK

June 25, 2005